MANUFACTURING EXTENSION PARTNERSHIP Success Stories from the Field

Technical Services Group

South Carolina Manufacturing Extension Partnership

Lean 5S Blitz

Client Profile:

Force Protection, Inc. manufactures the world's most advanced ballistic and mine protected vehicles through its wholly owned subsidiary, Technical Solutions Group, Inc. (TSG). Force Protection specialty vehicles use state-of-the-art technology to protect against landmines, hostile fire, Improvised Explosive Devices, and airbursts. Its customers are the U.S. military, military contractors, and humanitarian demining groups. TSG employs 145 people at its Pinehaven, South Carolina, facility.

Situation:

Force Protection CEO and TSG General Manager, Mike Watts, and South Carolina Manufacturing Extension Partnership (SCMEP), a NIST MEP network affiliate Manufacturing Specialist, Pete DuBrule, collaborated to help TSG in its quest to obtain ISO:9000 certification. After becoming certified, Watts needed a methodology to "spruce up" the new facility to showcase its manufacturing capabilities to a potential customer, the defense department of a foreign country who would visit the plant in the very near future.

Solution:

DuBrule led the TSG team through a Lean 5S blitz in which employees cleaned up the facility, removed unnecessary materials, set up in a more efficient fashion, and categorized supplies. In another initiative, SCMEP and its consulting team completed all design drawings for the Buffalo Mine Protected Clearance Vehicle (MPCV). "This was a very important project necessary before we could put the vehicle into production," said Watts. Dwayne Robinson, also with SCMEP, analyzed the vehicle design, creating staffing and plant layout plans from his findings. In an ongoing initiative, DuBrule brought in Larry Smith of Innovative Technologies for Business to set up a DBA software system to handle shipping/receiving, inventory control, and production management. Training of new employees is ongoing.

Results:

- * Completed Lean 5S in four days.
- * Secured orders from U.S. military, totaling about \$29 million.

Testimonial:

"So far, we have sold 13 of these vehicles and have orders from the U.S. military for 34 more to be delivered before the end of the year. This activity then led to orders for 16 Cougar vehicles."

Mike Watts, CEO and TSG General Manager

